

Application of NMR spectroscopy for the study of the three-dimensional structures of hydrogenated heterocycles (review)

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Abstract

A review of the dependences of the direct, geminal, vicinal, and long-range spin-spin coupling constants on the valence, dihedral, and torsion angles, and on the electronegativities and orientations of the heteroatoms is given. The empirical and nonempirical dependences for the constants with participation of the nuclei of the ^1H , ^{13}C , ^{14}N , ^{15}N , ^{19}F , ^{31}P , ^{29}Si , ^{119}Sn , and ^{199}Hg isotopes are presented. © 1979 Plenum Publishing Corporation.

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